

09/ 943,037

Connecting via Winsock to STN

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PASSWORD:

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\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAPLUS records now contain indexing from 1907 to the  
present  
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABA reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available  
in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAPLUS  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPU no longer updated; subscriber discount no longer  
available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS  
databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated  
and searchable  
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in  
CA/CAPLUS  
NEWS 22 FEB 05 German (DE) application and patent publication number format  
changes  
NEWS 23 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 25 MAR 03 FRANCEPAT now available on STN  
  
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT  
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 10:23:41 ON 11 MAR 2004

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 10:23:49 ON 11 MAR 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 10 MAR 2004 HIGHEST RN 661450-61-9

DICTIONARY FILE UPDATES: 10 MAR 2004 HIGHEST RN 661450-61-9

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

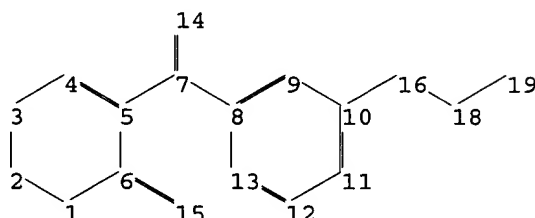
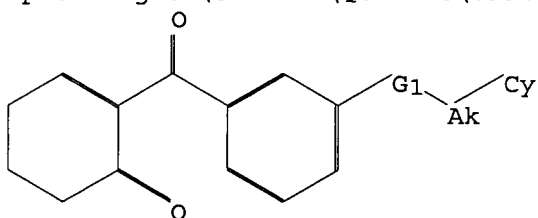
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\STNEXP4\QUERIES\09943037.str



chain nodes :

7 14 15 16 18 19

ring nodes :

1 2 3 4 5 6 8 9 10 11 12 13

chain bonds :

5-7 6-15 7-8 7-14 10-16 16-18 18-19

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-13 9-10 10-11 11-12 12-13

exact/norm bonds :

6-15 7-14 10-16 16-18 18-19

exact bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 7-8

normalized bonds :

8-9 8-13 9-10 10-11 11-12 12-13

isolated ring systems :

containing 1 : 8 :

09/ 943,037

G1:O,S,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:Atom 14:CLASS 15:CLASS 16:CLASS 18:CLASS 19:Atom

Generic attributes :

18:

Number of Carbon Atoms : less than 7

19:

Number of Carbon Atoms : less than 7

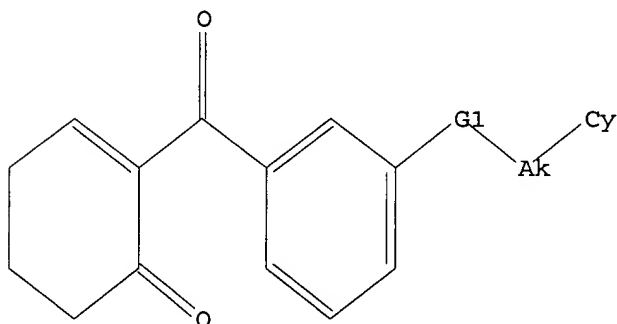
Type of Ring System : Monocyclic

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 O,S,N

Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful

FULL SEARCH INITIATED 10:24:10 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 785 TO ITERATE

100.0% PROCESSED 785 ITERATIONS

90 ANSWERS

SEARCH TIME: 00.00.01

L2 90 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

155.42

155.63

FILE 'CAPLUS' ENTERED AT 10:24:16 ON 11 MAR 2004

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09/ 943,037

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FILE COVERS 1907 - 11 Mar 2004 VOL 140 ISS 11  
FILE LAST UPDATED: 10 Mar 2004 (20040310/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2

L3 7 L2

=> d l3 1- ibib abs hitstr

YOU HAVE REQUESTED DATA FROM 7 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:818383 CAPLUS

DOCUMENT NUMBER: 139:323337

TITLE: Preparation of 2-(3-carbonylbenzoyl)- and  
2-(3-iminobenzoyl)cyclohexane-1,3-diones as herbicides

INVENTOR(S): Seitz, Thomas; Van Almsick, Andreas; Willms, Lothar;  
Schmitt, Monika H.; Auler, Thomas; Bieringer, Hermann;  
Menne, Hubert

PATENT ASSIGNEE(S): Bayer CropScience GmbH, Germany

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

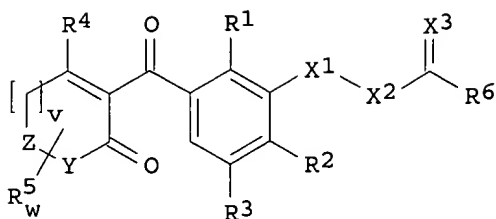
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003084912	A1	20031016	WO 2003-EP3250	20030328
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

DE 10215723 A1 20031030 DE 2002-10215723 20020410

PRIORITY APPLN. INFO.: DE 2002-10215723 A 20020410

OTHER SOURCE(S): MARPAT 139:323337

GI



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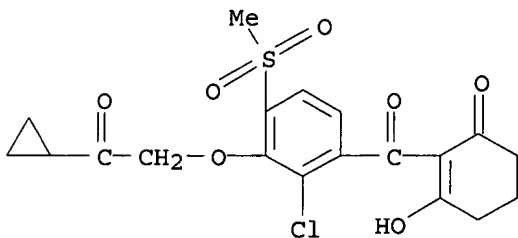
AB Title compds. [I; X1 = O, SOn, NH, NR6; X2 = (branched) (substituted) alkylene, alkenylene, alkynylene; X3 = O, S, NOR7; R1-R3 = H, mercapto, NO2, halo, cyano, thiocyanato, (substituted) alkyl, cycloalkyl, etc.; R2, R7 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, etc.; R4 = OR8, (halo)alkylthio, (halo)alkenylthio, (halo)alkynylthio, (halo)alkylsulfonyl, etc.; R5 = H, (substituted) alkyl, cycloalkyl, tetrahydropyran-3-yl, etc.; R8 = H, (halo)alkyl, alkoxyalkyl, CHO, alkylcarbonyl, etc.; Y = O, S, NH, N-alkyl, CHR5, C(R5)2; Z = bond, O, S, SO, SO2, NH, N-alkyl, CHR9, C(R9)2; R9 = H, halo, cyano, (halo)alkyl; v = 0-3; w = 0-4; n = 0-2], were prepared Thus, (3-oxo-1-cyclohexenyl) [2-chloro-3-(methylcarbonylmethoxy)-4-ethylsulfonyl]benzoate (preparation given) in MeCN followed by stirring with Me2C(OH)CN and ET3N for 3 h at room temperature to give 31% [2-chloro-3-(methylcarbonylmethoxy)-4-ethylsulfonylbenzoyl]cyclohexane-1,3-diones. The latter at 320 g/ha post-emergent gave 90-100% control of *Chenopodium album*, *Echinochloa crus-galli*, and *Veronica persica*. Several I at 80 and 320 g/ha gave 0% damage of wheat, rice, and corn.

IT 612846-15-8P 612846-24-9P 612846-25-0P  
612846-26-1P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of (carbonylbenzoyl)- and (iminobenzoyl)cyclohexanediones as herbicides)

RN 612846-15-8 CAPLUS

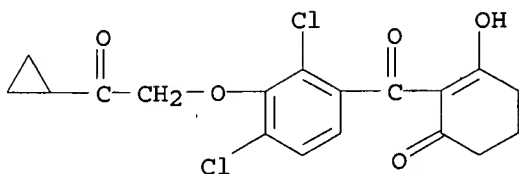
CN 2-Cyclohexen-1-one, 2-[2-chloro-3-(2-cyclopropyl-2-oxoethoxy)-4-(methylsulfonyl)benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 612846-24-9 CAPLUS

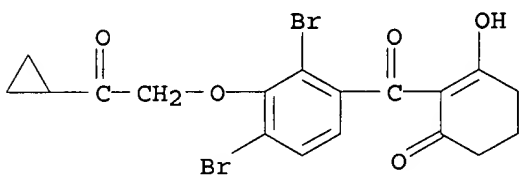
CN 2-Cyclohexen-1-one, 2-[2,4-dichloro-3-(2-cyclopropyl-2-oxoethoxy)benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)

09/ 943,037



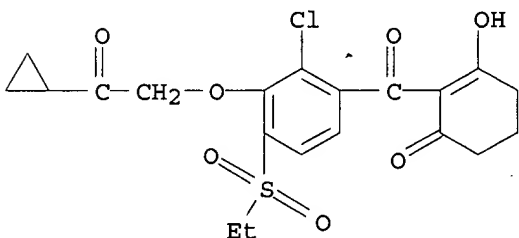
RN 612846-25-0 CAPLUS

CN 2-Cyclohexen-1-one, 2-[2,4-dibromo-3-(2-cyclopropyl-2-oxoethoxy)benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 612846-26-1 CAPLUS

CN 2-Cyclohexen-1-one, 2-[2-chloro-3-(2-cyclopropyl-2-oxoethoxy)-4-(ethylsulfonyl)benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:633677 CAPLUS

DOCUMENT NUMBER: 139:180066

TITLE: Preparation of novel tetrazole derivatives as herbicides

INVENTOR(S): Yanagi, Akihiko; Narabu, Shinichi; Yamaguchi, Yoshihiro; Goto, Toshio; Shirakura, Shinichi; Ueno, Chieko; Nakamura, Shin

PATENT ASSIGNEE(S): Bayer CropScience AG, Germany

SOURCE: PCT Int. Appl., 193 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066607	A1	20030814	WO 2003-EP772	20030127
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				

late

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,  
 RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
 NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
 ML, MR, NE, SN, TD, TG

JP 2003238540 A2 20030827 JP 2002-32551 20020208  
 PRIORITY APPLN. INFO.: JP 2002-32551 A 20020208  
 OTHER SOURCE(S): MARPAT 139:180066  
 GI

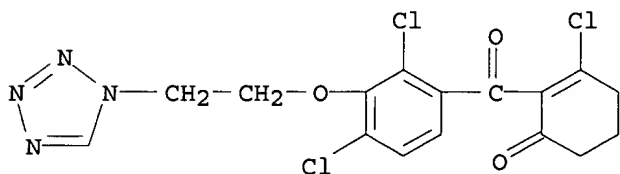
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. [I; R1 = halo, alkyl, haloalkyl, etc.; m = 0-3; n = 0-1; A = alkylene; T = II, III (wherein R2 = H, alkyl, cycloalkyl, etc.); Q = IV-VI, CH(CN)COR11 (R3 = OH, halo, alkylcarbonyloxy, etc.; R4-R9 = H, alkyl; R4 may, together with R9, form an ethylene chain; R10 = alkyl; R11 = alkyl, cycloalkyl)], useful in agriculture, were prepared Thus, treating 3-oxo-1-cyclohexenyl 2,4-dichloro-3-[2-(1H-tetrazol-1-yl)ethoxy]benzoate with Et3N and Me2C(OH)CN in MeCN afforded VII which showed a herbicidal activity of 90% against Echinochloa crusgalli, Setaria viridis, Amaranthus retroflexus and Polygonum at 2.0 kg/ha.

IT 579452-60-1P  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of novel tetrazole derivs. as herbicides)

RN 579452-60-1 CAPLUS

CN 2-Cyclohexen-1-one, 3-chloro-2-[2,4-dichloro-3-[2-(1H-tetrazol-1-yl)ethoxy]benzoyl]- (9CI) (CA INDEX NAME)

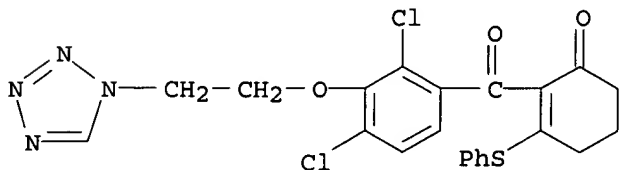


IT 579452-58-7P 579453-00-2P 579453-24-0P  
 579453-26-2P 579453-76-2P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of novel tetrazole derivs. as herbicides)

RN 579452-58-7 CAPLUS

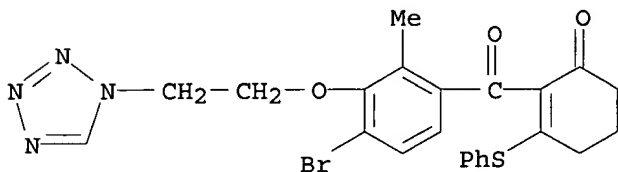
CN 2-Cyclohexen-1-one, 2-[2,4-dichloro-3-[2-(1H-tetrazol-1-yl)ethoxy]benzoyl]-3-(phenylthio)- (9CI) (CA INDEX NAME)



09/ 943,037

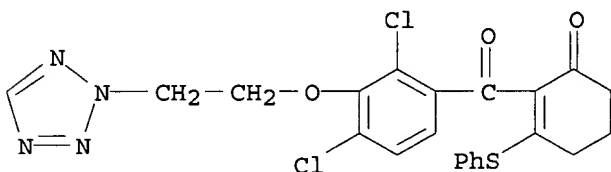
RN 579453-00-2 CAPLUS

CN 2-Cyclohexen-1-one, 2-[4-bromo-2-methyl-3-[2-(1H-tetrazol-1-yl)ethoxy]benzoyl]-3-(phenylthio)- (9CI) (CA INDEX NAME)



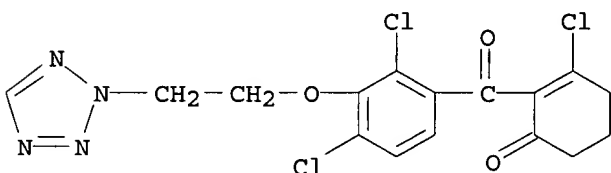
RN 579453-24-0 CAPLUS

CN 2-Cyclohexen-1-one, 2-[2,4-dichloro-3-[2-(2H-tetrazol-2-yl)ethoxy]benzoyl]-3-(phenylthio)- (9CI) (CA INDEX NAME)



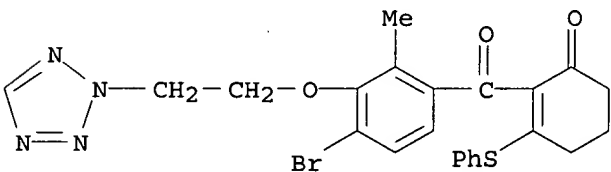
RN 579453-26-2 CAPLUS

CN 2-Cyclohexen-1-one, 3-chloro-2-[2,4-dichloro-3-[2-(2H-tetrazol-2-yl)ethoxy]benzoyl]- (9CI) (CA INDEX NAME)



RN 579453-76-2 CAPLUS

CN 2-Cyclohexen-1-one, 2-[4-bromo-2-methyl-3-[2-(2H-tetrazol-2-yl)ethoxy]benzoyl]-3-(phenylthio)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:221655 CAPLUS

DOCUMENT NUMBER: 138:237899

TITLE: Preparation of (3-aminocarbonylbenzoyl)cyclohexanediones as herbicides

INVENTOR(S): Seitz, Thomas; Van Almsick, Andreas; Willms, Lothar; Auler, Thomas; Bieringer, Hermann; Menne, Hubert

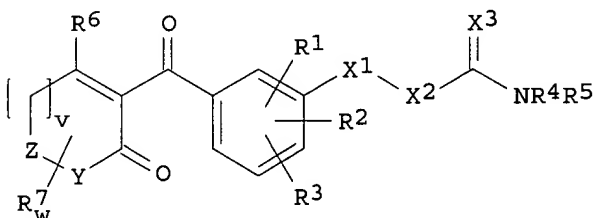


09/ 943,037

PATENT ASSIGNEE(S): Bayer CropScience GmbH, Germany  
SOURCE: PCT Int. Appl., 59 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003022810	A1	20030320	WO 2002-EP9876	20020904
W:	AE, AG, AL, AM, AU, AZ, BA, BB, BR, BY, BZ, CA, CN, CO, CR, CU, DM, DZ, EC, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MA, MD, MG, MK, MN, MX, NO, NZ, OM, PH, PL, RO, RU, SG, SI, TJ, TM, TN, TT, UA, US, UZ, VC, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
DE 10144529	A1	20030327	DE 2001-10144529	20010911
US 2003191027	A1	20031009	US 2002-238155	20020910
PRIORITY APPLN. INFO.:			DE 2001-10144529 A	20010911
OTHER SOURCE(S):	MARPAT 138:237899			

GI



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AB Title compds. [I; X1 = O, S(O)<sub>n</sub>NH, NR<sub>4</sub>; X2 = (substituted) alkylene, alkenylene, alkynylene; X3 = O, S; R1-R3 = H, SH, NO<sub>2</sub>, halo, cyano, thiocyanato, alkylcarbonyloxy, etc.; R<sub>4</sub>, R<sub>5</sub> = H, (cyclo)alkyl, (cyclo)alkenyl, (cyclo)alkynyl, alkylcycloalkyl, etc.; NR<sub>4</sub>R<sub>5</sub> = 5-6 membered (saturated) (Ph-benzocondensed) (substituted) heterocyclyl; R<sub>6</sub> = OR<sub>8</sub>, (halo)alkylthio, (halo)alkenylthio, (halo)alkynylthio, etc.; R<sub>7</sub> = H, tetrahydro(thio)pyran-3-yl, tetrahydropyran-4-yl, alkyl, cycloalkyl, etc.; Y = O, S, NH, N-alkyl, CHR<sub>7</sub>, CR<sub>72</sub>; Z = O, S, SO, SO<sub>2</sub>, NH, N-alkyl, CHR<sub>9</sub>, CR<sub>92</sub>; R<sub>8</sub> = H, (halo)alkyl, alkoxyalkyl, CHO, etc.; R<sub>9</sub> = H, halo, cyano, NO<sub>2</sub>, (halo)alkyl, etc.; n = 0-2; v = 0-3; w = 0-4], were prepared Thus, 2-chloro-3-(N,N-diethylaminocarbonylmethoxy)-4-ethylsulfonylbenzoic acid 3-oxo-1-cyclohexenyl ester (preparation given) in MeCN was dropwise treated with Me<sub>2</sub>C(OH)CN and Et<sub>3</sub>N followed by stirring for 2 h at room temperature and stirring with KCN for 10 h at room temperature to give 40% 2-[2-chloro-3-(N,N-diethylaminocarbonylmethoxy)-4-ethylsulfonylbenzoyl]cyclohexane-1,3-dione. I (R<sub>1</sub> = 2-Cl; R<sub>2</sub> = 4-Cl; R<sub>3</sub> = H; Y, Z = CH<sub>2</sub>; v = 1; X<sub>3</sub> = O; R<sub>6</sub> = OH; X<sub>1</sub>X<sub>2</sub> = OCH<sub>2</sub>; NR<sub>4</sub>R<sub>5</sub> = NEt<sub>2</sub>) at 90 g a.i./ha showed 90-95% postemergent control of *Cyperus serotinus*, *Monochoria vaginalis*, *Sagittaria pygmaea* and 0% damage of *Oryza sativa*.

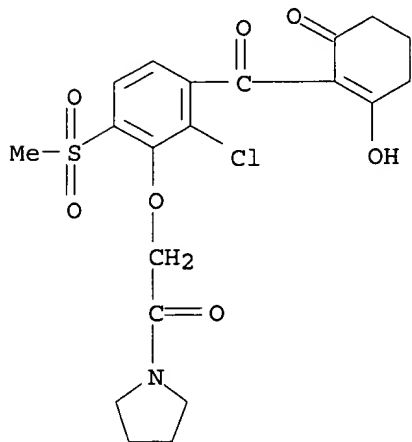
IT 502149-33-9P 502149-34-0P 502149-70-4P  
502149-71-5P 502149-72-6P 502149-73-7P  
502149-74-8P 502149-75-9P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

```

      (preparation of (aminocarbonylbenzoyl)cyclohexanediones as herbicides)
RN  502149-33-9  CAPLUS
CN  Pyrrolidine, 1-[[2-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-
    6-(methylsulfonyl)phenoxy]acetyl]- (9CI)  (CA INDEX NAME)

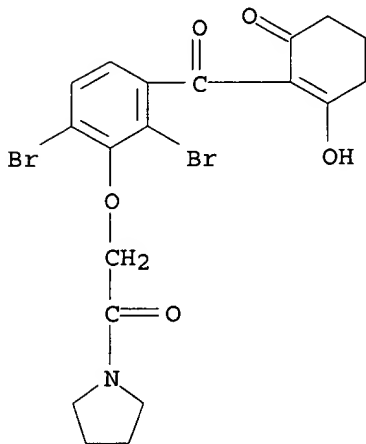
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09/ 943,037

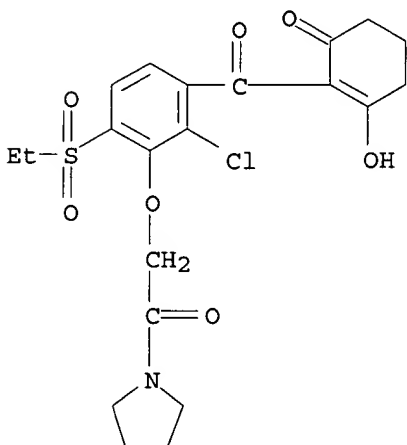
RN 502149-71-5 CAPLUS

CN Pyrrolidine, 1-[[2,6-dibromo-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenoxy]acetyl]- (9CI) (CA INDEX NAME)



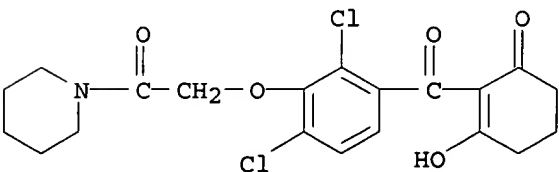
RN 502149-72-6 CAPLUS

CN Pyrrolidine, 1-[[2-chloro-6-(ethylsulfonyl)-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenoxy]acetyl]- (9CI) (CA INDEX NAME)



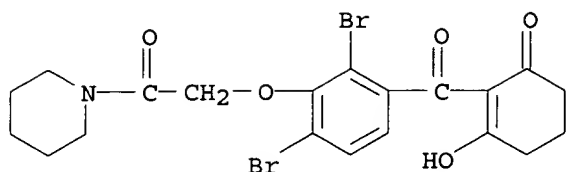
RN 502149-73-7 CAPLUS

CN Piperidine, 1-[[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenoxy]acetyl]- (9CI) (CA INDEX NAME)



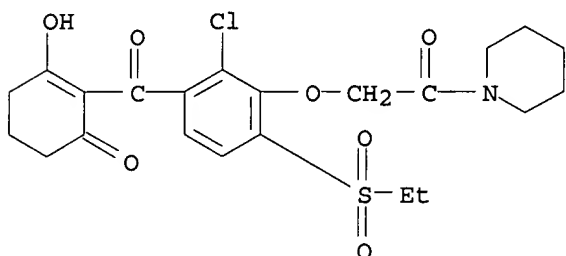
RN 502149-74-8 CAPLUS

CN Piperidine, 1-[[2,6-dibromo-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenoxy]acetyl]- (9CI) (CA INDEX NAME)



RN 502149-75-9 CAPLUS

CN Piperidine, 1-[[2-chloro-6-(ethylsulfonyl)-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenoxy]acetyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:888717 CAPLUS

DOCUMENT NUMBER: 137:370089

TITLE: Preparation of benzoylcyclohexenones as herbicides

INVENTOR(S): Schwarz, Hans-Georg; Mueller, Klaus-Helmut; Hermann, Stefan; Hoischen, Dorothee; Kather, Kristian; Lehr, Stefan; Schallner, Otto; Drewes, Mark Wilhelm; Dahmen, Peter; Feucht, Dieter; Pontzen, Rolf

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 141 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

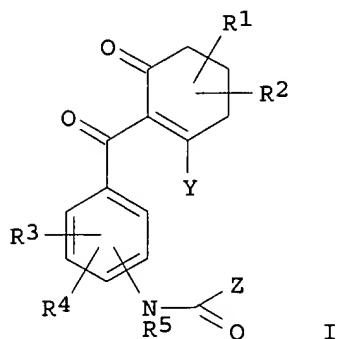
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092574	A1	20021121	WO 2002-EP4851	20020503
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10138576	A1	20021121	DE 2001-10138576	20010806
EP 1392660	A1	20040303	EP 2002-730231	20020503
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.: DE 2001-10123887 A 20010516				
DE 2001-10138576 A 20010806				

OTHER SOURCE(S):  
GI

MARPAT 137:370089



AB Title compds. [I; Q = O, S; R1 = H, halo, (substituted) alkyl, alkylthio, aryl; R2 = H, halo, (substituted) alkyl; or R1R2 = O, alkylene; R3, R4 = H, NO2, cyano, CO2H, (thio)carbamoyl, halo, (substituted) alkyl, alkoxy, etc.; R5 = H, (substituted) alkyl, alkoxy, alkylthio, etc.; Y = OH, halo, (substituted) alkoxy, alkylthio, alkylsulfinyl, etc.; Z = H, amino, cyanoamino, nitroamino, hydroxyamino, hydrazino, (substituted) alkyl, alkylcarbonyl, alkoxy, alkoxy carbonyl, etc.], were prepared. Thus, a mixture of 2,4-dichloro-3-[(3-methyl-2-oxo-1-imidazolidinyl)carbonylamino]benzoic acid (preparation given), cyclohexane-1,3-dione, dicyclohexylcarbodiimide (DCC), and MeCN was stirred for 18 at 20° followed by filtering to give 49% N-[2,6-dichloro-3-(2,6-dioxocyclohexyl)carbonylphenyl]-3-methyl-2-oxo-1-imidazolidinecarboxamide. Several I were said to show strong pre- and postemergent herbicidal activity and good crop tolerance.

IT 475555-75-0P 475555-77-2P 475555-78-3P  
475555-86-3P 475555-87-4P 475555-88-5P  
475555-94-3P 475555-96-5P 475556-02-6P  
475556-03-7P 475556-08-2P 475556-09-3P  
475556-10-6P 475556-11-7P 475556-17-3P  
475556-26-4P 475556-28-6P 475556-29-7P  
475556-31-1P 475556-32-2P 475556-34-4P  
475556-35-5P 475556-36-6P

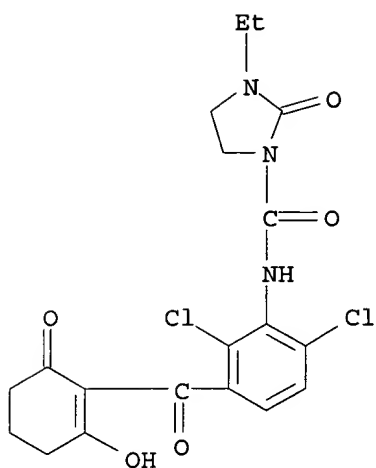
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzoylcyclohexenones as herbicides)

RN 475555-75-0 CAPLUS

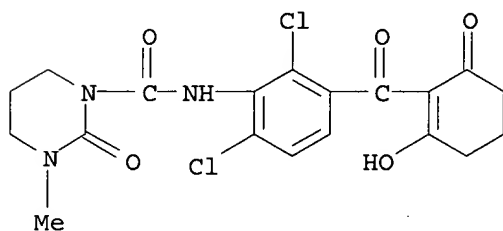
CN 1-Imidazolidinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]-3-ethyl-2-oxo- (9CI) (CA INDEX NAME)

09/ 943,037



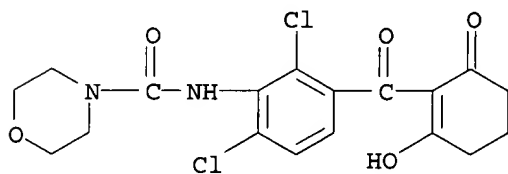
RN 475555-77-2 CAPLUS

CN 1(2H)-Pyrimidinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]tetrahydro-3-methyl-2-oxo- (9CI) (CA INDEX NAME)



RN 475555-78-3 CAPLUS

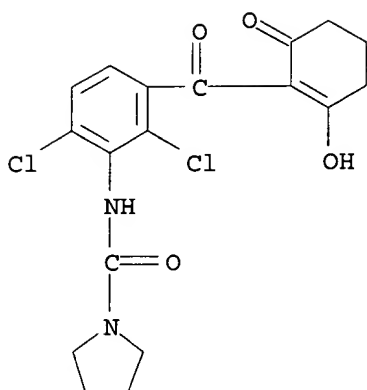
CN 4-Morpholinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 475555-86-3 CAPLUS

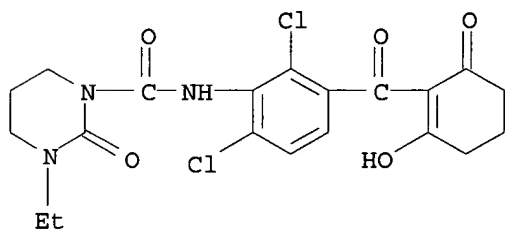
CN 1-Pyrrolidinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)

09/ 943,037



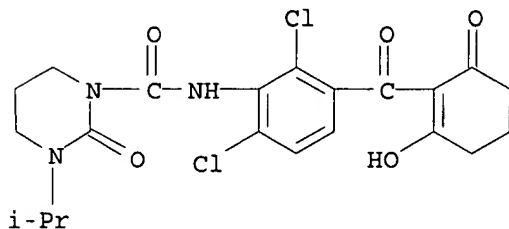
RN 475555-87-4 CAPLUS

CN 1(2H)-Pyrimidinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]-3-ethyltetrahydro-2-oxo- (9CI) (CA INDEX NAME)



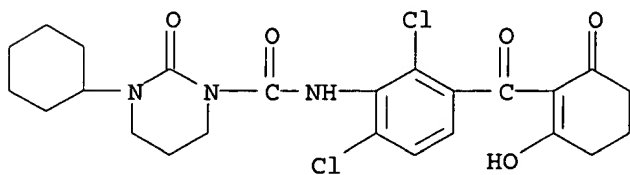
RN 475555-88-5 CAPLUS

CN 1(2H)-Pyrimidinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]tetrahydro-3-(1-methylethyl)-2-oxo- (9CI) (CA INDEX NAME)



RN 475555-94-3 CAPLUS

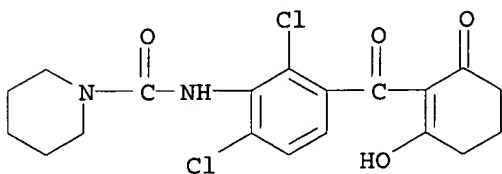
CN 1(2H)-Pyrimidinecarboxamide, 3-cyclohexyl-N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]tetrahydro-2-oxo- (9CI) (CA INDEX NAME)



09/ 943,037

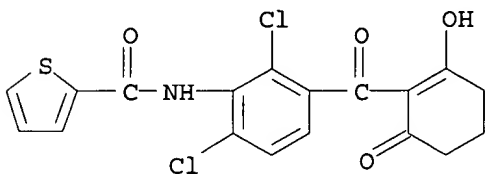
RN 475555-96-5 CAPLUS

CN 1-Piperidinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



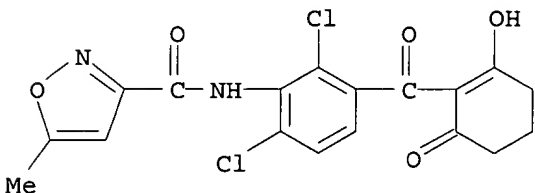
RN 475556-02-6 CAPLUS

CN 2-Thiophenecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



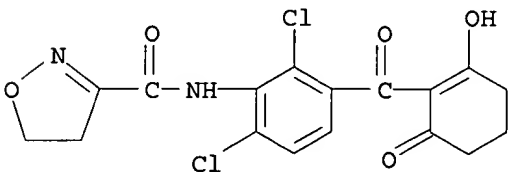
RN 475556-03-7 CAPLUS

CN 3-Isoxazolecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]-5-methyl- (9CI) (CA INDEX NAME)



RN 475556-08-2 CAPLUS

CN 3-Isoxazolecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]-4,5-dihydro- (9CI) (CA INDEX NAME)

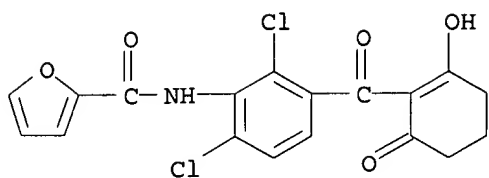


RN 475556-09-3 CAPLUS

CN 2-Furancarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)

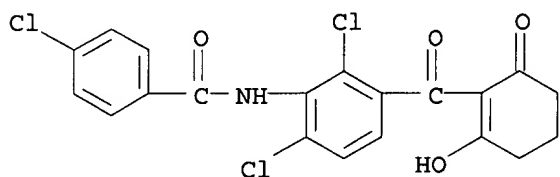


09/ 943,037



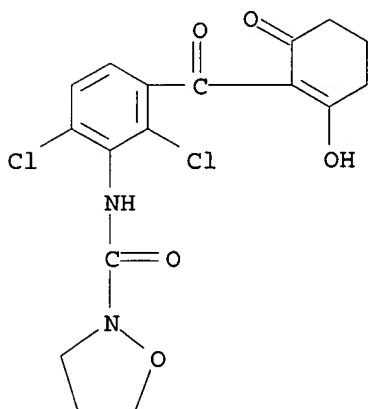
RN 475556-10-6 CAPLUS

CN Benzamide, 4-chloro-N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



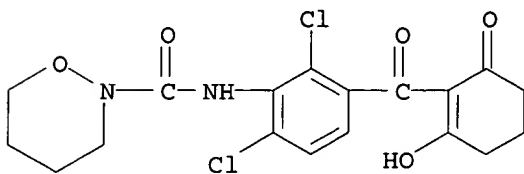
RN 475556-11-7 CAPLUS

CN 2-Isioxazolidinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 475556-17-3 CAPLUS

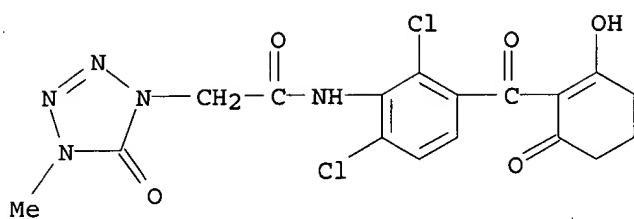
CN 2H-1,2-Oxazine-2-carboxamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]tetrahydro- (9CI) (CA INDEX NAME)



RN 475556-26-4 CAPLUS

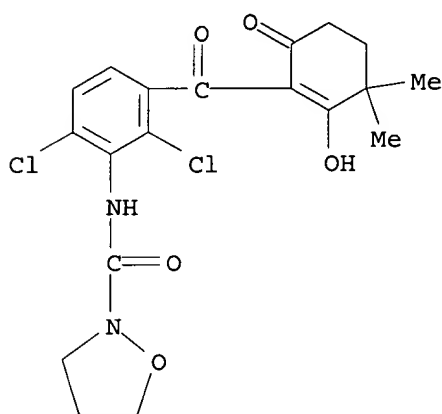
CN 1H-Tetrazole-1-acetamide, N-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]-4,5-dihydro-4-methyl-5-oxo- (9CI) (CA INDEX NAME)

09/ 943,037



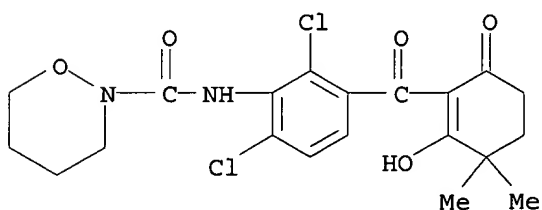
RN 475556-28-6 CAPLUS

CN 2-Isioxazolidinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-3,3-dimethyl-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 475556-29-7 CAPLUS

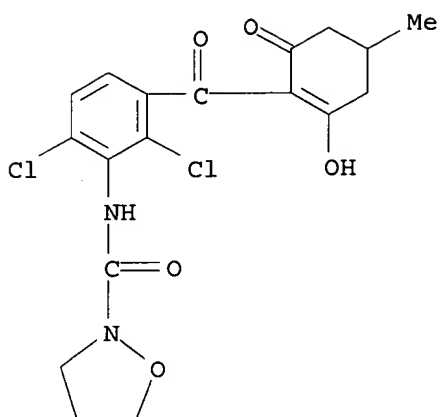
CN 2H-1,2-Oxazine-2-carboxamide, N-[2,6-dichloro-3-[(2-hydroxy-3,3-dimethyl-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]tetrahydro- (9CI) (CA INDEX NAME)



RN 475556-31-1 CAPLUS

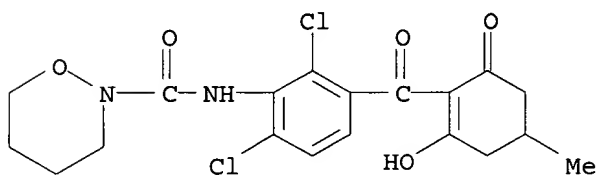
CN 2-Isioxazolidinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-4-methyl-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)

09/ 943,037



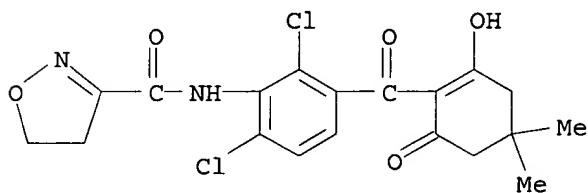
RN 475556-32-2 CAPLUS

CN 2H-1,2-Oxazine-2-carboxamide, N-[2,6-dichloro-3-[(2-hydroxy-4-methyl-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]tetrahydro- (9CI) (CA INDEX NAME)



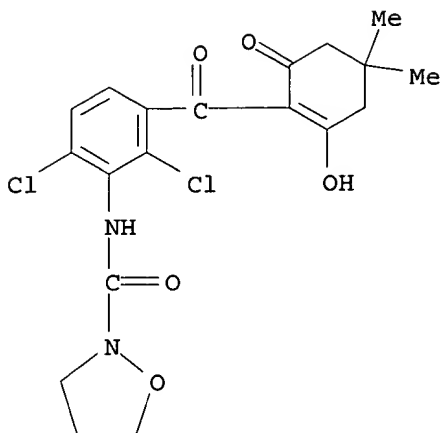
RN 475556-34-4 CAPLUS

CN 3-Isioxazolecaboxamide, N-[2,6-dichloro-3-[(2-hydroxy-4,4-dimethyl-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]-4,5-dihydro- (9CI) (CA INDEX NAME)



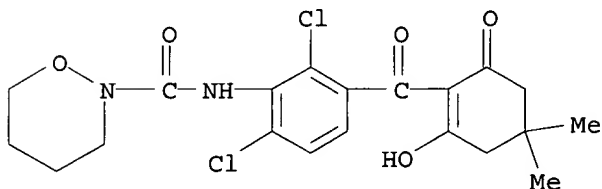
RN 475556-35-5 CAPLUS

CN 2-Isioxazolidinecarboxamide, N-[2,6-dichloro-3-[(2-hydroxy-4,4-dimethyl-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 475556-36-6 CAPLUS

CN 2H-1,2-Oxazine-2-carboxamide, N-[2,6-dichloro-3-[(2-hydroxy-4,4-dimethyl-6-oxo-1-cyclohexen-1-yl)carbonyl]phenyl]tetrahydro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:874399 CAPLUS

DOCUMENT NUMBER: 136:5744

TITLE: Preparation method of cyclohexenones and use as herbicides

INVENTOR(S): Nakamura, Yuji; Palmer, Christopher John; Kikugawa, Hiroshi; Sano, Makiko; Ono, Ken

PATENT ASSIGNEE(S): Ishihara Sangyo Kaisha, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 43 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

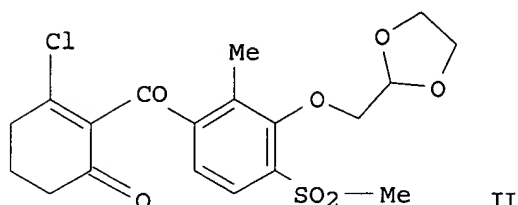
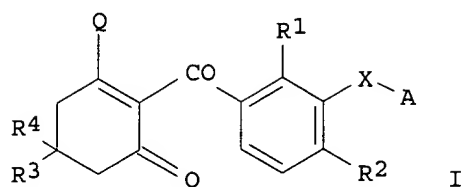
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001335573	A2	20011204	JP 2000-154970	20000525
PRIORITY APPLN. INFO.:			JP 2000-154970	20000525
OTHER SOURCE(S): CASREACT 136:5744; MARPAT 136:5744				

GI



AB Title compds. [I; X = alkyleneoxy, alkyleneylthioxy; A = heterocyclyl; Q = halo, O(CH<sub>2</sub>)<sub>n</sub>R<sub>5</sub>; R<sub>1</sub> = H, alkyl; R<sub>2</sub> = H, alkyl; R<sub>3</sub> = H, alkyl; R<sub>4</sub> = H, alkyl] and salts are prepared as the active component of herbicides. Thus, the title compound II was prepared and in vivo tested.

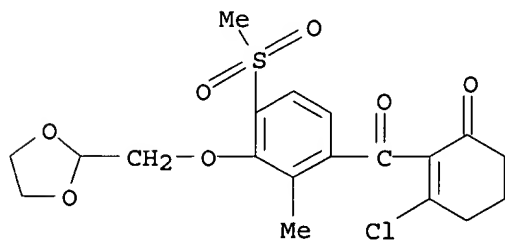
IT 376418-18-7P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation method of cyclohexenones and use as herbicides)

RN 376418-18-7 CAPLUS

CN 2-Cyclohexen-1-one, 3-chloro-2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]- (9CI) (CA INDEX NAME)



IT 376418-31-4P 376418-38-1P 376418-48-3P

376418-56-3P 376418-64-3P 376418-72-3P

376418-80-3P 376418-87-0P 376418-94-9P

376419-01-1P 376419-10-2P 376419-17-9P

376419-23-7P 376419-31-7P 376419-39-5P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

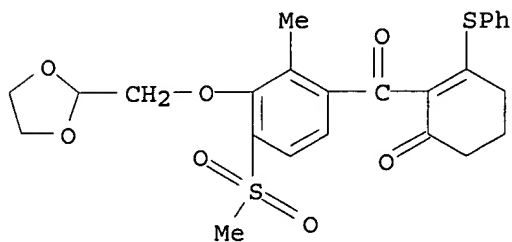
(preparation method of cyclohexenones and use as herbicides)

RN 376418-31-4 CAPLUS

CN 2-Cyclohexen-1-one, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-

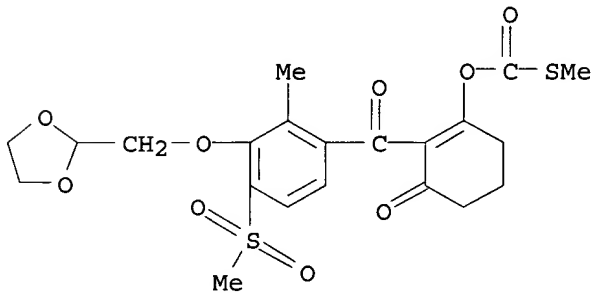
09/ 943,037

(methylsulfonyl)benzoyl]-3-(phenylthio)- (9CI) (CA INDEX NAME)



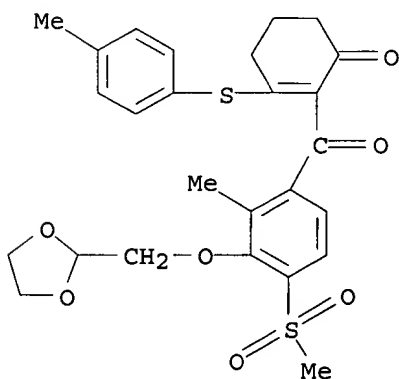
RN 376418-38-1 CAPLUS

CN Carbonothioic acid, O-[2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-oxo-1-cyclohexen-1-yl] S-methyl ester (9CI)  
(CA INDEX NAME)



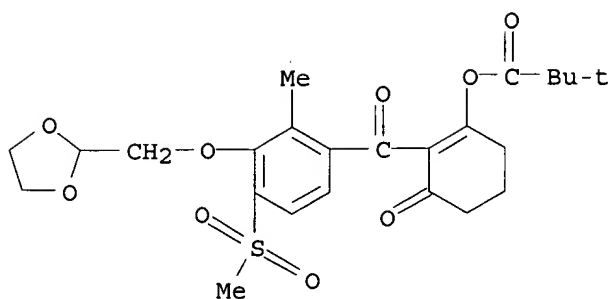
RN 376418-48-3 CAPLUS

CN 2-Cyclohexen-1-one, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-[(4-methylphenyl)thio]- (9CI) (CA INDEX NAME)



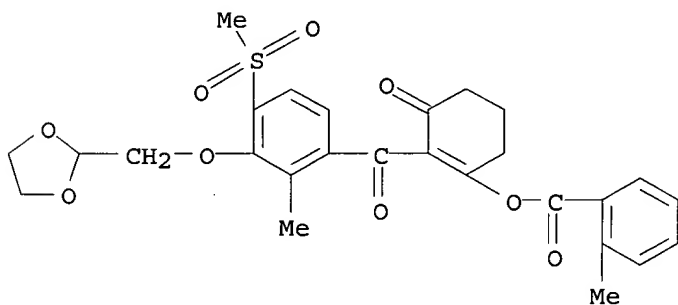
RN 376418-56-3 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-oxo-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)



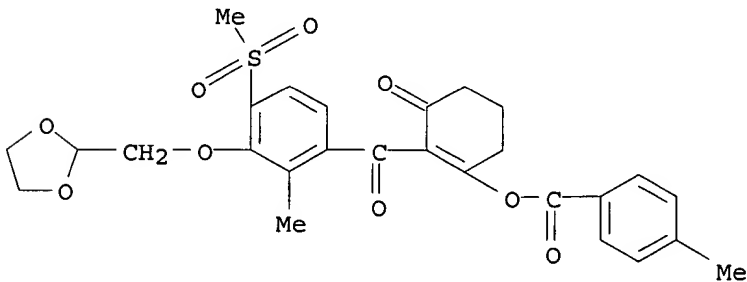
RN 376418-64-3 CAPLUS

CN Benzoic acid, 2-methyl-, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-oxo-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)



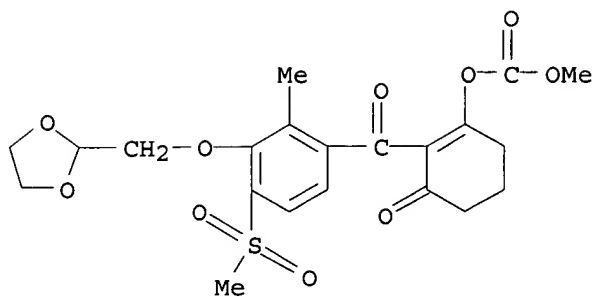
RN 376418-72-3 CAPLUS

CN Benzoic acid, 4-methyl-, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-oxo-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)

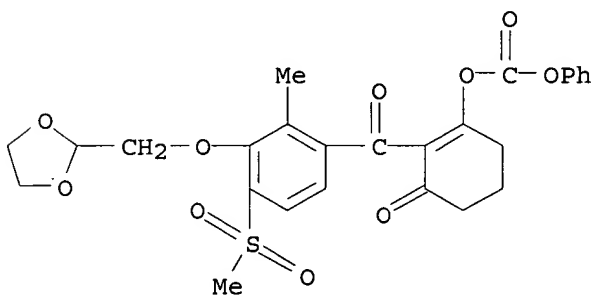


RN 376418-80-3 CAPLUS

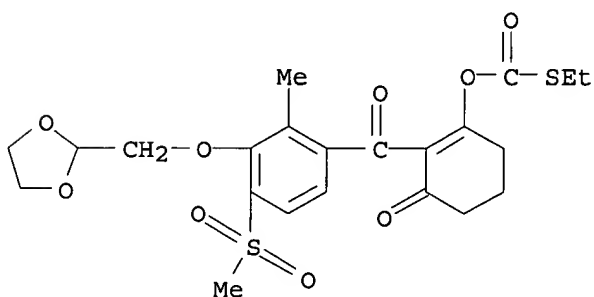
CN Carbonic acid, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-oxo-1-cyclohexen-1-yl methyl ester (9CI) (CA INDEX NAME)



RN 376418-87-0 CAPLUS  
 CN Carbonic acid, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-oxo-1-cyclohexen-1-yl phenyl ester (9CI) (CA INDEX NAME)

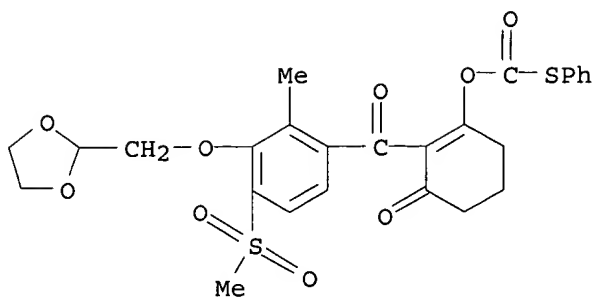


RN 376418-94-9 CAPLUS  
 CN Carbonothioic acid, O-[2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-oxo-1-cyclohexen-1-yl] S-ethyl ester (9CI) (CA INDEX NAME)



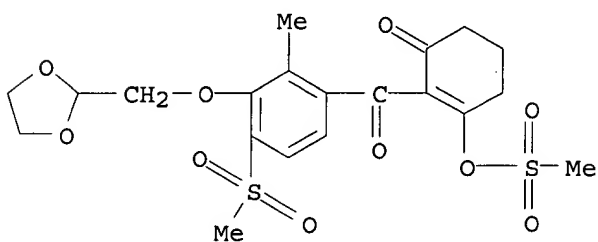
RN 376419-01-1 CAPLUS  
 CN Carbonothioic acid, O-[2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-oxo-1-cyclohexen-1-yl] S-phenyl ester (9CI) (CA INDEX NAME)





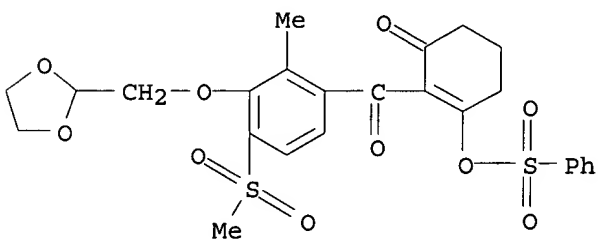
RN 376419-10-2 CAPLUS

CN 2-Cyclohexen-1-one, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-[(methylsulfonyl)oxy]- (9CI) (CA INDEX NAME)



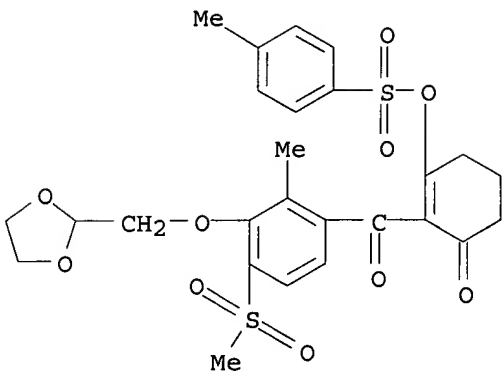
RN 376419-17-9 CAPLUS

CN 2-Cyclohexen-1-one, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(phenylsulfonyl)benzoyl]-3-[(phenylsulfonyl)oxy]- (9CI) (CA INDEX NAME)



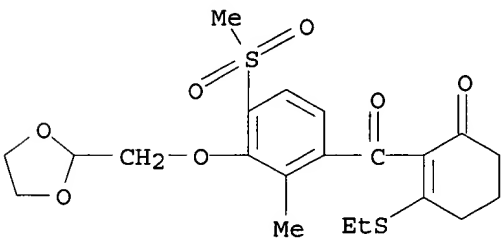
RN 376419-23-7 CAPLUS

CN 2-Cyclohexen-1-one, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-[(4-methylphenyl)sulfonyl]oxy]-3-[(4-methylphenyl)sulfonyl]oxy]- (9CI) (CA INDEX NAME)



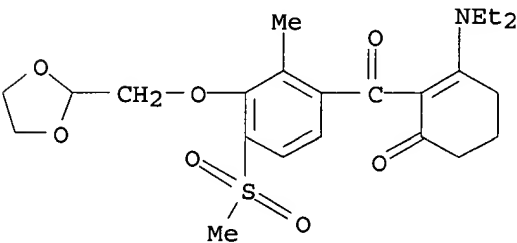
RN 376419-31-7 CAPLUS

CN 2-Cyclohexen-1-one, 2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-3-(ethylthio)- (9CI) (CA INDEX NAME)



RN 376419-39-5 CAPLUS

CN 2-Cyclohexen-1-one, 3-(diethylamino)-2-[3-(1,3-dioxolan-2-ylmethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]- (9CI) (CA INDEX NAME)



L3 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:523547 CAPLUS

DOCUMENT NUMBER: 135:92638

TITLE: Preparation of 4-[3-[2-(1H-triazolin-1-yl)alkoxy]benzoyl]-1H-pyrazoles as herbicides

INVENTOR(S) : Schallner, Otto; Lehr, Stefan; Schwarz, Hans-Georg;  
Mueller, Klaus-Helmut; Hoischen, Dorothee; Drewes,  
Mark Wilhelm; Dahmen, Peter; Feucht, Dieter; Pontzen,  
Rolf; Yanagi, Akihiko; Narabu, Shinichi; Goto, Toshio  
PATENT ASSIGNEE(S) : Bayer A.-G., Germany; Nihon Bayer Agrochem K.K.

SOURCE: Ger. Offen., 54 pp.

CODEN: GWXXBX

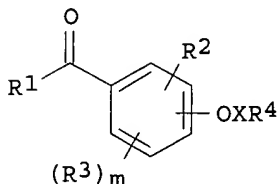
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001053275	A2	20010726	WO 2001-EP92	20010105
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BR 2001007624	A	20021112	BR 2001-7624	20010105
EP 1324996	A2	20030709	EP 2001-903626	20010105
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JP 2004504266	T2	20040212	JP 2001-553277	20010105
US 2003153465	A1	20030814	US 2002-181327	20020715
PRIORITY APPLN. INFO.:				
			DE 2000-10001588	A1 20000117
			DE 2000-10039723	A 20000814
			WO 2001-EP92	W 20010105
OTHER SOURCE(S):				
GI				
			MARPAT 135:92638	



AB Title compds. [I; R1 = (substituted) dioxocycloalkyl, oxazolyl, pyrazolyl, alkylcarbonyl; R2 = H, NO<sub>2</sub>, cyano, CO<sub>2</sub>H, carbamoyl, thiocarbamoyl, halo, (substituted) alkyl, alkoxy, alkylthio, etc.; R3 = NO<sub>2</sub>, cyano, CO<sub>2</sub>H, carbamoyl, thiocarbamoyl, halo, (substituted) alkyl, alkoxy, alkylthio, alkylsulfinyl, etc.; R4 = (substituted) mono- or bicyclic heterocyclyl; X = alkylene; n = 0-2] were prepared as herbicides (no data). Thus, 3-[2-(3,4-dimethyl-1,2,4-1H-triazolin-5-on-1-yl)ethoxy]-2-methyl-4-methylsulfonylbenzoyl chloride (analog preparation given) in CH<sub>2</sub>Cl<sub>2</sub> was treated with 1-ethyl-5-hydroxypyrazole, Et<sub>3</sub>N, and 1 drop of DMF followed by stirring for 24 h at 20° to give 88% 4-[3-[2-(3,4-dimethyl-1,2,4-1H-triazolin-5-on-1-yl)ethoxy]-2-methyl-4-methylsulfonylbenzoyl]-1-ethyl-5-hydroxy-1H-pyrazole. I were said to show very strong pre- and postemergent herbicidal activity and good crop tolerance.

IT 349478-83-7P 349478-85-9P 349478-87-1P  
 349478-89-3P 349478-90-6P 349478-92-8P  
 349479-01-2P 349479-04-5P 349479-06-7P  
 349479-07-8P 349479-09-0P 349479-11-4P  
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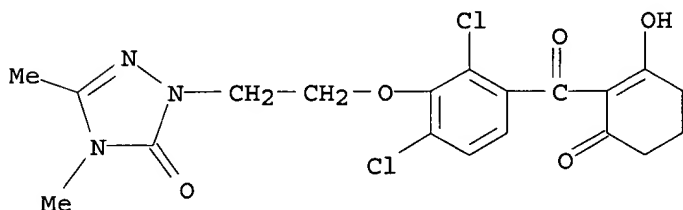
RL: AGR (Agricultural use); BAC (Biological activity or effector, except

09/ 943,037

adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of triazolinyloxybenzoylpyrazoles as herbicides)

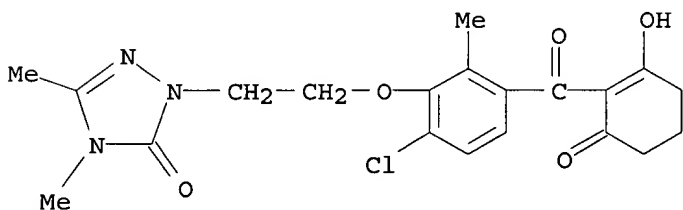
RN 349478-83-7 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 2-[2-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenoxy]ethyl]-2,4-dihydro-4,5-dimethyl- (9CI)  
(CA INDEX NAME)



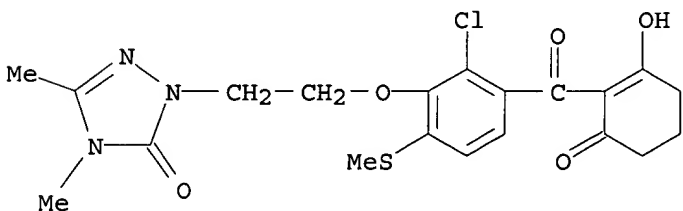
RN 349478-85-9 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 2-[2-[6-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-2-methylphenoxy]ethyl]-2,4-dihydro-4,5-dimethyl- (9CI) (CA INDEX NAME)



RN 349478-87-1 CAPLUS

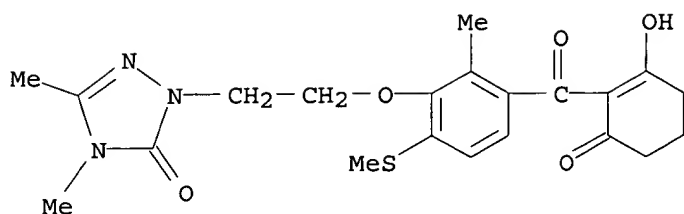
CN 3H-1,2,4-Triazol-3-one, 2-[2-[2-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-6-(methylthio)phenoxy]ethyl]-2,4-dihydro-4,5-dimethyl- (9CI)  
(CA INDEX NAME)



RN 349478-89-3 CAPLUS

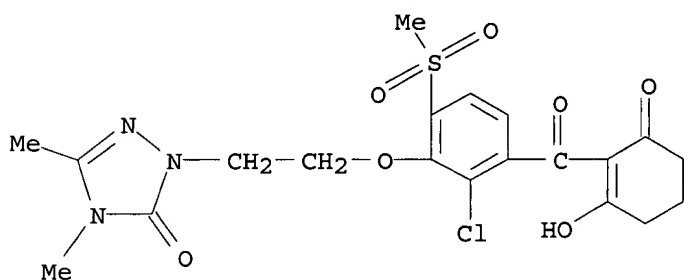
CN 3H-1,2,4-Triazol-3-one, 2,4-dihydro-2-[2-[3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-2-methyl-6-(methylthio)phenoxy]ethyl]-4,5-dimethyl- (9CI)  
(CA INDEX NAME)

09/ 943,037



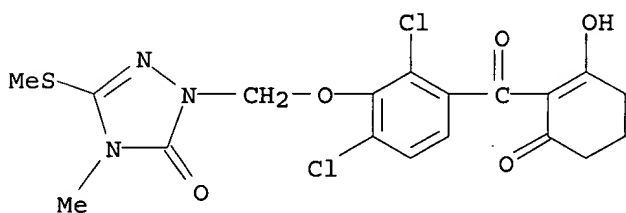
RN 349478-90-6 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 2-[2-[2-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-6-(methylsulfonyl)phenoxy]ethyl]-2,4-dihydro-4,5-dimethyl- (9CI) (CA INDEX NAME)



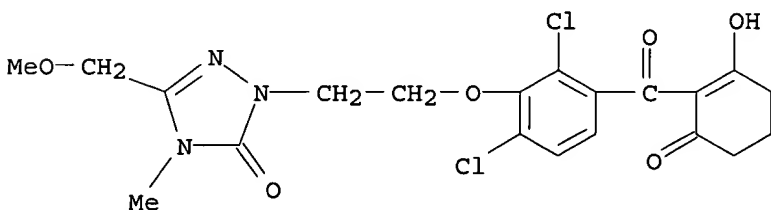
RN 349478-92-8 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 2-[[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenoxy]methyl]-2,4-dihydro-4-methyl-5-(methylthio)- (9CI) (CA INDEX NAME)



RN 349479-01-2 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 2-[2-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenoxy]ethyl]-2,4-dihydro-5-(methoxymethyl)-4-methyl- (9CI) (CA INDEX NAME)

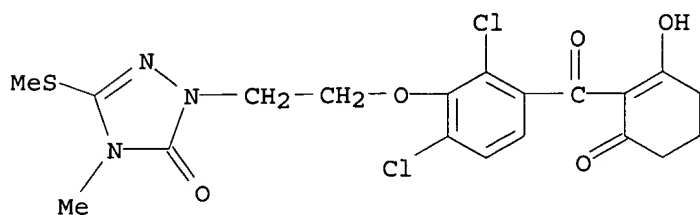


RN 349479-04-5 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 2-[2-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-

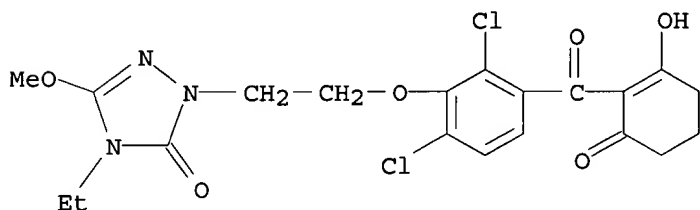
09/ 943,037

cyclohexen-1-yl) carbonyl] phenoxy] ethyl] -2,4-dihydro-4-methyl-5-(methylthio)- (9CI) (CA INDEX NAME)



RN 349479-06-7 CAPLUS

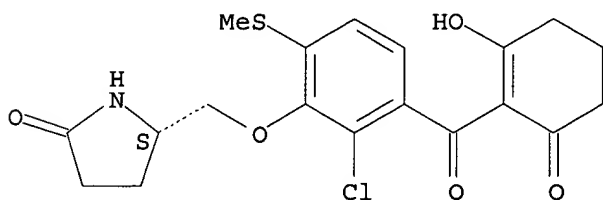
CN 3H-1,2,4-Triazol-3-one, 2-[2-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl) carbonyl] phenoxy] ethyl]-4-ethyl-2,4-dihydro-5-methoxy- (9CI) (CA INDEX NAME)



RN 349479-07-8 CAPLUS

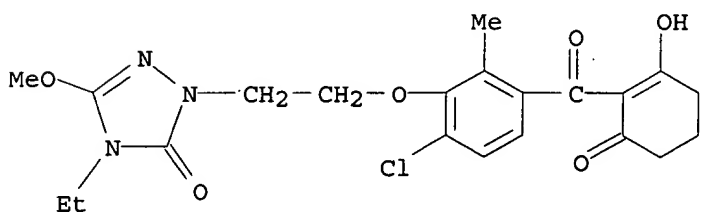
CN 2-Pyrrolidinone, 5-[[2-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl) carbonyl]-6-(methylthio)phenoxy]methyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 349479-09-0 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 2-[2-[6-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl) carbonyl]-2-methylphenoxy] ethyl]-4-ethyl-2,4-dihydro-5-methoxy- (9CI) (CA INDEX NAME)

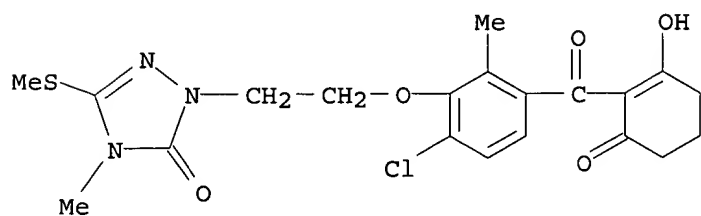


RN 349479-11-4 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 2-[2-[6-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-

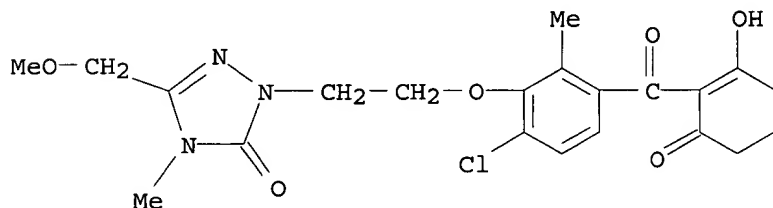
09/ 943,037

yl)carbonyl]-2-methylphenoxy]ethyl]-2,4-dihydro-4-methyl-5-(methylthio)-  
(9CI) (CA INDEX NAME)



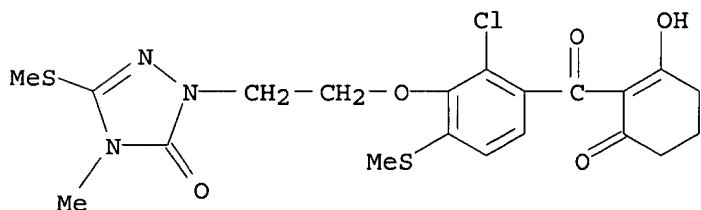
RN 349479-13-6 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 2-[2-[6-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-2-methylphenoxy]ethyl]-2,4-dihydro-5-(methoxymethyl)-4-methyl-  
(9CI) (CA INDEX NAME)



RN 349479-15-8 CAPLUS

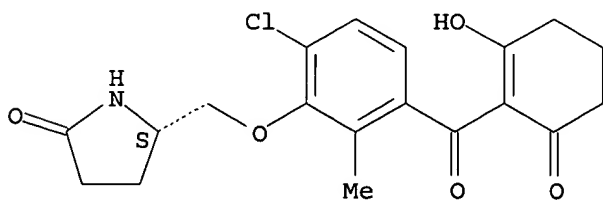
CN 3H-1,2,4-Triazol-3-one, 2-[2-[2-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-6-(methylthio)phenoxy]ethyl]-2,4-dihydro-4-methyl-5-(methylthio)- (9CI) (CA INDEX NAME)



RN 349479-17-0 CAPLUS

CN 2-Pyrrolidinone, 5-[[6-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-2-methylphenoxy]methyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



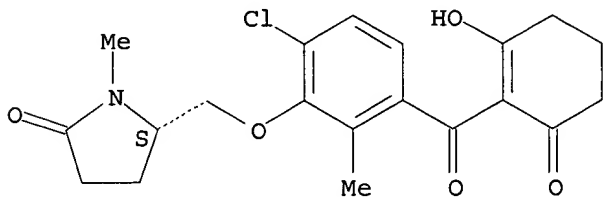
RN 349479-19-2 CAPLUS

CN 2-Pyrrolidinone, 5-[[6-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-

09/ 943,037

yl)carbonyl]-2-methylphenoxy)methyl]-1-methyl-, (5S)- (9CI) (CA INDEX NAME)

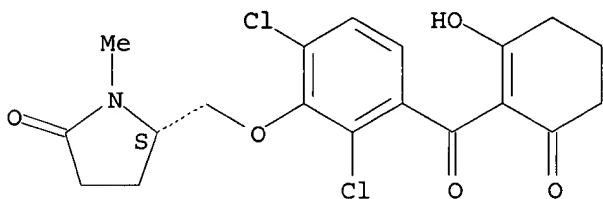
Absolute stereochemistry.



RN 349479-20-5 CAPLUS

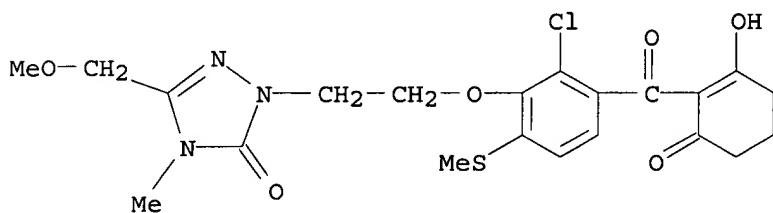
CN 2-Pyrrolidinone, 5-[[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenoxy)methyl]-1-methyl-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 349479-24-9 CAPLUS

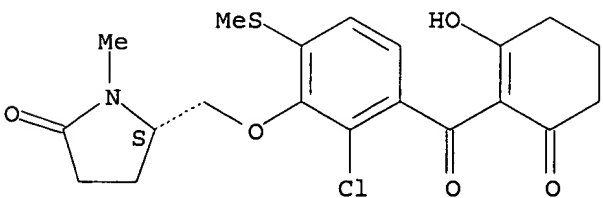
CN 3H-1,2,4-Triazol-3-one, 2-[2-[2-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-6-(methylthio)phenoxy]ethyl]-2,4-dihydro-5-(methoxymethyl)-4-methyl- (9CI) (CA INDEX NAME)



RN 349479-26-1 CAPLUS

CN 2-Pyrrolidinone, 5-[[2-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-6-(methylthio)phenoxy)methyl]-1-methyl-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



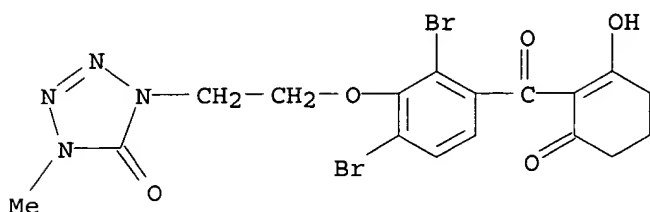
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CN 5H-Tetrazol-5-one, 1-[2-[2,6-dibromo-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-



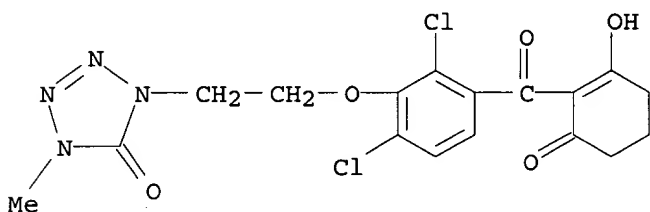
09/ 943,037

yl)carbonyl]phenoxy]ethyl]-1,4-dihydro-4-methyl- (9CI) (CA INDEX NAME)



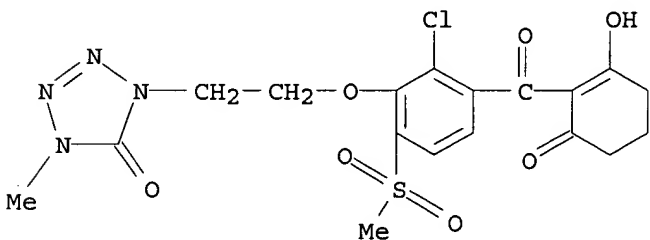
RN 349479-29-4 CAPLUS

CN 5H-Tetrazol-5-one, 1-[2-[2,6-dichloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]phenoxy]ethyl]-1,4-dihydro-4-methyl- (9CI) (CA INDEX NAME)



RN 349479-31-8 CAPLUS

CN 5H-Tetrazol-5-one, 1-[2-[2-chloro-3-[(2-hydroxy-6-oxo-1-cyclohexen-1-yl)carbonyl]-6-(methylsulfonyl)phenoxy]ethyl]-1,4-dihydro-4-methyl- (9CI) (CA INDEX NAME)



L3 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:338507 CAPLUS

DOCUMENT NUMBER: 134:340502

TITLE: Preparation of benzoylcyclohexanediones and benzoylpyrazoles as herbicides and plant growth regulators.

INVENTOR(S): Seitz, Thomas; Willms, Lothar; Auler, Thomas; Bieringer, Hermann; Thuerwaechter, Felix

PATENT ASSIGNEE(S): Aventis CropScience GmbH, Germany

SOURCE: PCT Int. Appl., 113 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

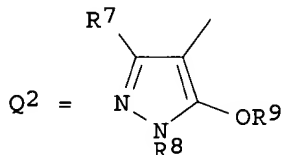
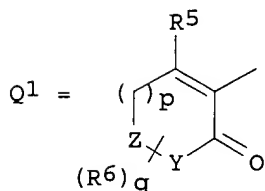
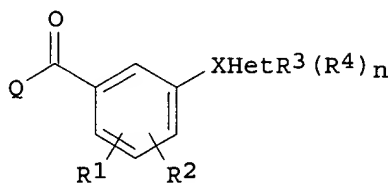
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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 PRIORITY APPLN. INFO.:      DE 1999-19953136 A      19991104  
    WO 2000-EP10460      W      20001024  
 OTHER SOURCE(S):      MARPAT 134:340502  
 GI



AB Title compds. [I; Q = Q<sup>1</sup>, Q<sup>2</sup>; X = OR<sub>3a</sub>, OCOR<sub>3a</sub>, OCONHR<sub>3a</sub>, OSO<sub>2</sub>R<sub>3a</sub>, alkyl, alkenyl, alkynyl, Ph, etc.; R<sub>1</sub>, R<sub>2</sub> = H, SH, NO<sub>2</sub>, halo, cyano, alkyl, alkoxyalkyl, haloalkyl, alkenyl, alkynyl, etc.; R<sub>3</sub> = H, OH, halo, SH, amino, cyano, NO<sub>2</sub>, CHO, alkoxycarbonyl, alkylcarbonyl, etc.; R<sub>3a</sub> = H, (substituted) alkyl, alkenyl, alkynyl, Ph, phenylalkyl; R<sub>4</sub> = [C(R<sub>11</sub>)<sub>2</sub>]mAr[C(R<sub>11</sub>)<sub>2</sub>]mR<sub>12</sub>; A = O, S; R<sub>5</sub> = OR<sub>16</sub>, alkylthio, haloalkylthio, alkenylthio, haloalkenylthio, alkynylthio, haloalkynylthio, alkylsulfinyl, haloalkylsulfinyl, etc.; R<sub>6</sub> = H, tetrahydropyranyl, tetrahydrothiopyranyl, (substituted) alkyl, cycloalkyl, alkoxy, alkylcarbonyl, alkoxyalkyl, etc.; R<sub>7</sub> = H, alkyl, haloalkyl; R<sub>8</sub> = alkyl, haloalkyl, (substituted) Ph; R<sub>9</sub> = H, alkyl, haloalkyl, alkylcarbonyl, alkoxycarbonyl, haloalkylcarbonyl, alkoxycarbonyl, alkylsulfonyl, haloalkylsulfonyl, (substituted) PhCO, PhCOCH<sub>2</sub>, PhOCO<sub>2</sub>, PhSO<sub>2</sub>, etc.; R<sub>11</sub> = H, alkyl, halo; R<sub>12</sub> = (substituted) cycloalkyl, cycloalkenyl, aryl, heterocyclyl, heteroaryl, etc.; Y = O, S, NH, CHR<sub>6</sub>, C(R<sub>6</sub>)<sub>2</sub>, alkylimino; Z = bond, O, S, SO, SO<sub>2</sub>, NH, alkylimino, CHR<sub>7</sub>, C(R<sub>7</sub>)<sub>2</sub>; m, n = 0-2; p = 1, 2; q = 0-4; r = 0, 1], were prepared Thus, 2-chloro-3-(3-phenylisoxazol-5-yl)methoxy-4-methylsulfonylbenzoic acid (preparation given), cyclohexane-1,3-dione, N'-(3-dimethylaminopropyl)-N-ethylcarbodiimide hydrochloride, and dimethylaminopyridine were stirred in CH<sub>2</sub>Cl<sub>2</sub> to give 60% enol ether, which was stirred with acetone cyanohydrin,

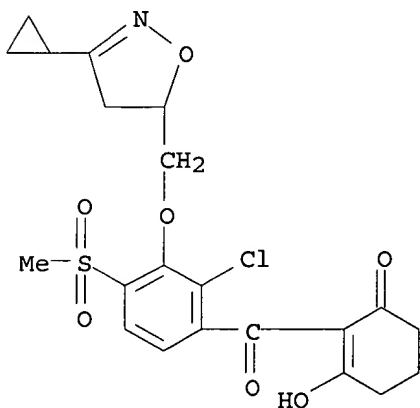
Et<sub>3</sub>N, and KCN in MeCN to give 55% 2-[2-chloro-3-(3-phenylisoxazol-5-yl)methoxy-4-methylsulfonylbenzoyl]cyclohexan-1,3-dione. Several I at ≤1 kg/ha postemergent gave ≥80% control of *Sinapis alba* and *Stellaria media*.

IT 338461-72-6P 338461-73-7P 338461-74-8P  
338461-75-9P 338461-76-0P 338461-77-1P  
338461-80-6P 338461-81-7P 338461-82-8P  
338461-83-9P 338461-84-0P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of benzoylcyclohexanediones and benzoylpyrazoles as herbicides and plant growth regulators)

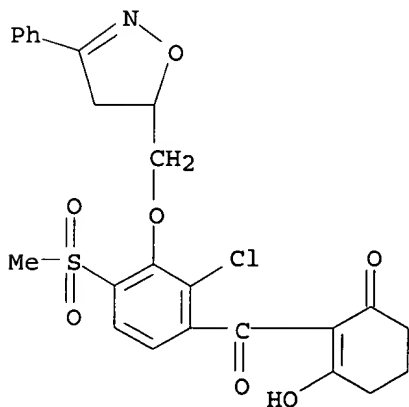
RN 338461-72-6 CAPLUS

CN 2-Cyclohexen-1-one, 2-[2-chloro-3-[(3-cyclopropyl-4,5-dihydro-5-isoxazolyl)methoxy]-4-(methylsulfonyl)benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 338461-73-7 CAPLUS

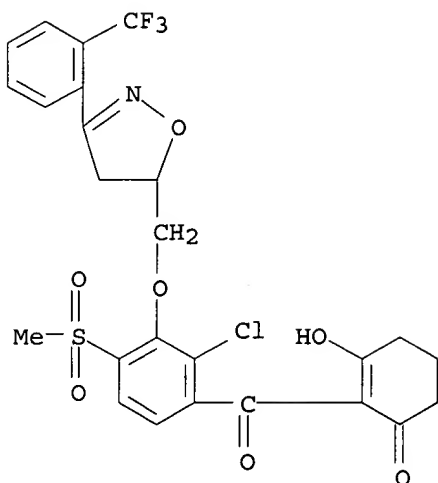
CN 2-Cyclohexen-1-one, 2-[2-chloro-3-[(4,5-dihydro-3-phenyl-5-isoxazolyl)methoxy]-4-(methylsulfonyl)benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 338461-74-8 CAPLUS

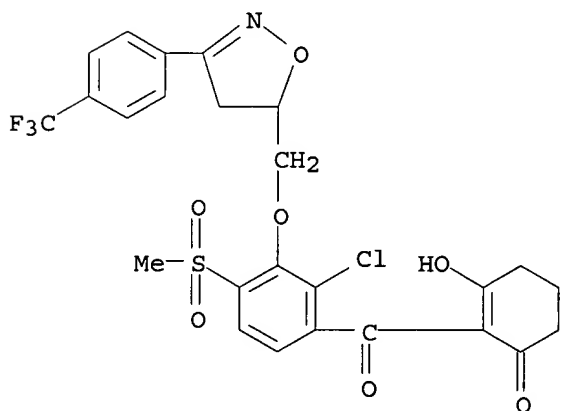
CN 2-Cyclohexen-1-one, 2-[2-chloro-3-[[4,5-dihydro-3-[2-(trifluoromethyl)phenyl]-5-isoxazolyl]methoxy]-4-(methylsulfonyl)benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)

09/ 943,037



RN 338461-75-9 CAPLUS

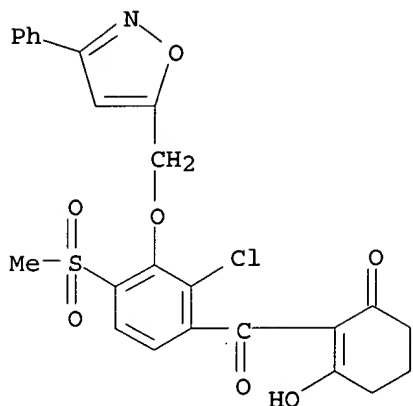
CN 2-Cyclohexen-1-one, 2-[2-chloro-3-[[4,5-dihydro-3-[4-(trifluoromethyl)phenyl]-5-isoxazolyl]methoxy]-4-(methylsulfonyl)benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 338461-76-0 CAPLUS

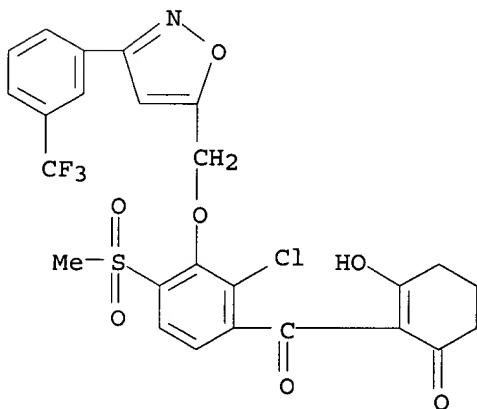
CN 2-Cyclohexen-1-one, 2-[2-chloro-4-(methylsulfonyl)-3-[(3-phenyl-5-isoxazolyl)methoxy]benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)

09/ 943,037



RN 338461-77-1 CAPLUS

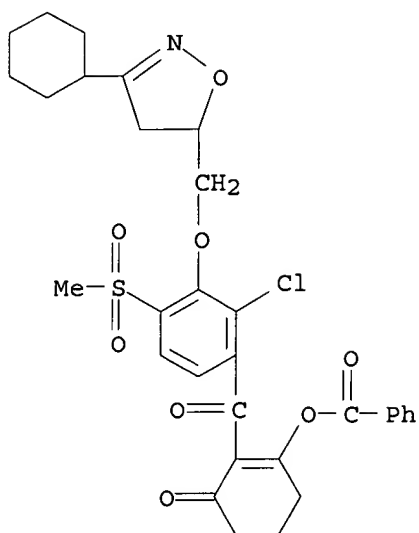
CN 2-Cyclohexen-1-one, 2-[2-chloro-4-(methanesulfonyl)-3-[[3-(3-(trifluoromethyl)phenyl)-5-isoxazolyl]methoxy]benzoyl]-3-hydroxy- (9CI)  
(CA INDEX NAME)



RN 338461-80-6 CAPLUS

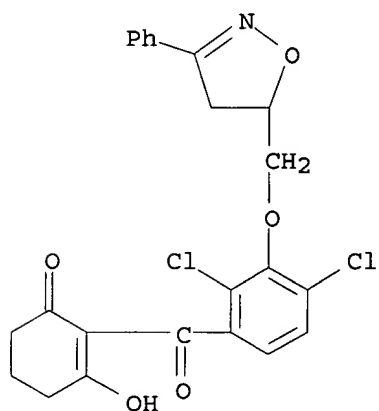
CN 2-Cyclohexen-1-one, 3-(benzoyloxy)-2-[2-chloro-3-[(3-cyclohexyl-4,5-dihydro-5-isoxazolyl)methoxy]-4-(methanesulfonyl)benzoyl]- (9CI) (CA INDEX NAME)

09/ 943,037



RN 338461-81-7 CAPLUS

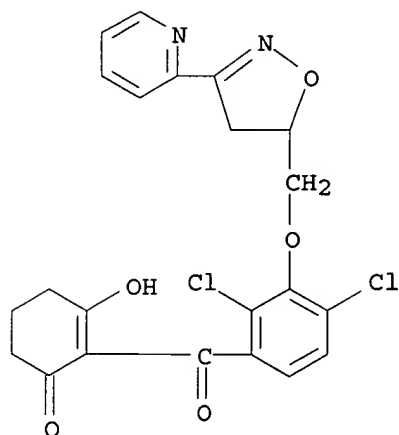
CN 2-Cyclohexen-1-one, 2-[2,4-dichloro-3-[(4,5-dihydro-3-phenyl-5-isoxazolyl)methoxy]benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 338461-82-8 CAPLUS

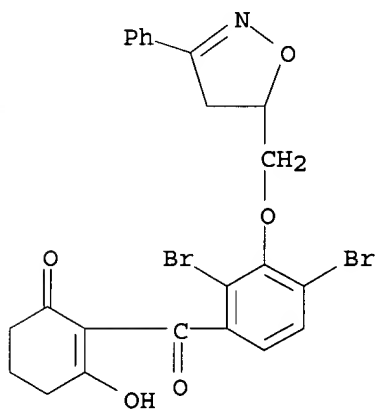
CN 2-Cyclohexen-1-one, 2-[2,4-dichloro-3-[[4,5-dihydro-3-(2-pyridinyl)-5-isoxazolyl]methoxy]benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)

09/ 943,037



RN 338461-83-9 CAPLUS

CN 2-Cyclohexen-1-one, 2-[2,4-dibromo-3-[(4,5-dihydro-3-phenyl-5-isoxazolyl)methoxy]benzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 338461-84-0 CAPLUS

CN 2-Cyclohexen-1-one, 2-[3-[(3-cyclopropyl-4,5-dihydro-5-isoxazolyl)methoxy]-4-(methylsulfonyl)-2-nitrobenzoyl]-3-hydroxy- (9CI) (CA INDEX NAME)

